

ABSTRACT

The invention relates to hydrophilic superabsorbent polymer comprising a) from about 55 to about 99.9 wt.% of polymerizable unsaturated acid group containing
5 monomers; b) from about 0.001 to about 5.0 wt.% of internal crosslinking agent; c) from about 0.001 to about 5.0 wt.% of surface crosslinking agent applied to the particle surface; and d) wherein the composition has a degree of neutralization of more than about 20%, and from about 20 mole % to about 75 mole % of the unsaturated acid group containing monomers are neutralized with a first neutralizing agent, and from about 5
10 mole % to about 40 mole % of the unsaturated acid group containing monomers are neutralized with a second neutralizing agent; at a temperature of about 75°C or less. Such hydrophilic superabsorbent polymers have an Absorption Time of about $5+10 a^2$ minutes or greater, where a is the mean particle size of the superabsorbent material in millimeters, a capacity of about 15 g/g or greater, a Drop Penetration Value of about 2
15 seconds or less, and a ½ Float Saturation of 50% or less.